Claims

1. A staple oligonucleotide which is a single-stranded oligonucleotide comprising a 5′-end sequence, an intermediate sequence and a 3′-end sequence, the 5′-end sequence having a reverse complementarity with the intermediate sequence, the 3′-end sequence having a reverse complementarity with the intermediate sequence and the intermediate sequence having loops at both ends, the loops each comprising three to ten nucleotides and not forming a complementary bond intermolecularly.

2. The staple oligonucleotide according to claim 1, wherein the single-stranded oligonucleotide comprises 30 to 70 nucleotides in length.

3. The staple oligonucleotide according to claim 1 or 2, wherein the single-stranded oligonucleotide comprises 34 to 64 nucleotides in length.

4. The staple oligonucleotide according to any one of claims 1 to 3, wherein the single-stranded oligonucleotide comprises 38 to 58 nucleotides in length.

5. The staple oligonucleotide according to any one of claims 1 to 4, wherein the single-stranded oligonucleotide comprises 42 to 54 nucleotides in length.

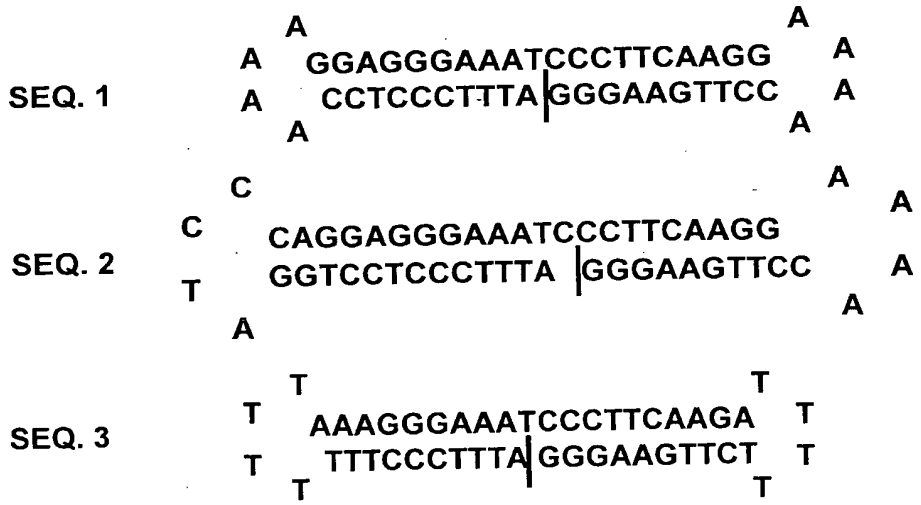
6. The staple oligonucleotide according to any one of claims 1 to 5, wherein the loops each comprise 4 to 6 nucleotides in length.

7. The staple oligonucleotide according to any one of claims 1 to 6, wherein the single-stranded oligonucleotide comprises 42 to 54 nucleotides in length, and the loops each comprise 4 to 6 nucleotides in length.

8. The staple oligonucleotide according to any one of claims 1 to 7, wherein the oligonucleotide is a DNA or a DNA derivative.

9. The staple oligonucleotide according to any one of claims 1 to 8, whose phosphate groups are not phosphorothioated.

10. The staple oligonucleotide according to any one of claims 1 to 9, which is one selected from the group consisting of oligodeoxynucleotides of Sequence No. 1 to 3 of Sequence Listing, or an oligodeoxynucleotide represented by the following structural formula:



wherein the vertical lines mean a non-binding site (5′ end and 3′ end).

11. A medicament comprising the staple oligonucleotide according to any one of claims 1 to 10.

12. The medicament according to claim 11, which is a transcription factor inhibitor, an antisense or an siRNA.

13. The medicament according to claim 12, wherein the transcription factor inhibitor is an antagonistic inhibitor.

14. The medicament according to claim 12 or 13, wherein the transcription factor is one selected from the group consisting of NF-κB, STAT-1, STAT-2, STAT-3, STAT-4, STAT-5, STAT-6, GATA-3, AP-1, E2F, Ets and CRE.

15. The medicament according to any one of claims 12 to 14, which is an agent for preventing, treating or improving inflammation, an allergic disease, an autoimmune disease, a central disease, reperfusion injury in a ischaemic disease, worsened prognosis after organ transplantation or organ surgery, or restenosis after percutaneous transluminal coronary angioplasty (PTCA).

16. The medicament according to any one of claims 12 to 15, wherein the inflammation is arthritis, dermatitis, nephritis, hepatitis, renal failure, cystitis, prostatitis, urethritis, ulcerative colitis or Crohn disease.

17. The medicament according to claim 16, wherein the arthritis is chronic rheumatoid arthritis or osteoarthritis.

18. The medicament according to claim 16, wherein the dermatitis is atopic dermatitis, contact dermatitis, psoriasis, cutaneous ulcer or decubitus.

19. Use of the staple oligonucleotide according to any one of claims 1 to 10, for producing a transcription factor inhibitor, an antisense or an siRNA.

20. A method for preventing, treating or improving a disease against which a transcription factor inhibitor, an antisense or an siRNA is efficacious, the method comprises the step of administering, to a patient, a pharmacologically effective amount of the staple oligonucleotide according to any one of claims 1 to 10.